<u>REMARKS</u>

Claims 1-21 remain pending. Claims 1, 4, 9, 18, and 20 have been amended.

Claims 22-24 have been added. No new matter has been added.

<u>35 U.S.C. Section 102(e) Rejections</u>

Paragraph 3 of the above referenced Office Action rejects independent Claim 1, 9,

and 18, as well as some dependent claims, as being anticipated by U.S. Patent No.

6,625,696 (hereinafter Willke). As such, Applicants respectfully traverse and assert that

the independent Claims 1, 9, and 18 are not anticipated or rendered obvious by Willke.

Applicants do not concede that Willke is in fact prior art with respect to the instant

application. Applicants reserve the right to antedate the Willke reference.

Applicants respectfully direct the Examiner to independent Claim 1 which recites

in part (emphasis added):

<div align="center">***</div>

a tracker within the prefetcher and configured to <u>recognize processor accesses to a plurality of cache lines within a low latency memory operable to supply data to the processor responsive to processor data requests,</u> wherein the processor accesses form a stream type sequential access pattern, and wherein further the tracker is configured to use a bit vector to predictively load a target cache line indicated by the stream-type sequential access pattern from the high latency memory into the low latency memory for the processor in preparation for the target cache line being requested by the processor as part of the stream-type processor access pattern.

<div align="center">***</div>

Independent Claim 9 and 18 recite distinguishing limitations similar to those recited in

Claim 1.

Applicants respectfully assert that Willke does not teach or suggest embodiments of the present invention as recited in Claim 1. Applicants point out that Claim 1 recites recognizing processor accesses within a low latency memory (e.g., cache) operable to supply data to the processor responsive to processor data requests, as claimed. In contrast, Applicants respectfully point out that Willke merely mentions that cache 412 and accompanying control logic 411 (of Figure 4) are generally used in transfers for data from storage device 420 to CPU 400 (Col. 8, lines 5-7). That is, Willke does not specifically teach recognizing processor accesses to a low latency memory, as claimed. Thus, Applicants respectfully assert that Willke does not teach or suggest the limitations of a tracker within a prefetcher configured to <u>recognize processor accesses</u> to a plurality of cache lines within a <u>low latency memory operable to supply data to a processor responsive to processor data requests</u>, as claimed (emphasis added).

In addition with respect to Figures 1-3 and 5 of Willke, Applicants believe that the "requesting devices" of Willke are not processors, as claimed. Again, Willke fails to teach or suggest recognizing processor accesses within a low latency memory (e.g., cache) operable to supply data to the processor responsive to processor data requests, as claimed. In contrast, the requesting devices of Willke are peripherals (Col. 1, lines 7-9 and lines 46-49) and none of the requesting devices are ever referred to or used as a CPU or "processor". Applicants point out that Figure 4 of Willke depicts a CPU separate from a "requesting device." Therefore, Applicants respectfully assert that the requesting devices of Willke are not processors, as claimed. Accordingly, Applicants respectfully asset that Willke does not anticipate Claim 1 within the meaning of 35 U.S.C. §102(e) nor does Willke render Claim 1 obvious within the meaning of 35 U.S.C. §103(a).

Independent Claims 9 and 18 are patentable for similar reasons. All related

dependent claims are patentable at least by virtue of their dependency.

35 U.S.C. Section 103 Rejections

Paragraph 5 of the above referenced Office Action rejects dependent Claims 6,

13, and 15 under 35 U.S.C. 103(a) as being unpatentable over Willke. Applicants do not

concede that Willke is in fact prior art with respect to the instant application. Applicants

reserve the right to antedate the Willke reference. For the reasons stated above,

Applicants respectfully assert that independents Claim 1, 9, and 18 are allowable over

Willke. As such, Applicants respectfully assert that Claims 6, 13, and 15 are not

rendered obvious by Willke at least by virtue of their dependency. Therefore, Applicants

respectfully assert that embodiments as recited by Claims 6, 13, and 15 are not rendered

obvious by Willke within the meaning of 35 U.S.C. 103(a).

The above referenced Office Action also rejects Claim 17 under 35 U.S.C. 103(a)

as being unpatentable over Willke further in view of Microsoft Computer Dictionary

(hereinafter "Microsoft"). Applicants respectfully disagree. Applicants do not concede

that Willke and Microsoft are in fact prior art with respect to the instant application.

Applicants reserve the right to antedate the Willke and Microsoft references. For the

reasons stated above, Applicants respectfully submit that independent Claim 9, from

which Claim 17 depends is allowable over Willke. In addition, Applicants respectfully

submit that Microsoft does not remedy the shortcomings of Willke. Therefore,

Applicants respectfully assert that the embodiments of the present invention as recited in

Claim 17 are not rendered obvious by the combination of Willke and Microsoft within the meaning of 35 U.S.C. 103(a).

The above referenced Office Action rejects Claims 19 and 20 under 35 U.S.C. 103(a) as being unpatentable over Willke further in view of Brooks (US 6,081,868). Applicants respectfully disagree. Applicants do not concede that Willke and Brooks are in fact prior art with respect to the instant application. Applicants reserve the right to antedate the Willke and Brooks references. For the reasons stated above, Applicant respectfully submits that independent Claim 18, from which Claims 19 and 20 depend are allowable over Willke. In addition, Applicants respectfully submit that Brooks does not remedy the shortcomings of Willke. Therefore, Applicants respectfully assert that the embodiments of the present invention as recited in Claim 19 and 20 are not rendered obvious by the combination of Willke and Brooks within the meaning of 35 U.S.C. 103(a).

CONCLUSION

The Examiner is urged to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application. Please charge any additional fees or apply any credits to our PTO deposit account number: 50-4160.

Respectfully submitted,
MURABITO, HAO & BARNES

Dated: ____6/19-2009____

/Michael D. Sochor/
Michael D. Sochor
Registration No. 58,348

Two North Market Street
Third Floor
San Jose, CA 95113
(408) 938-9060